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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,736	12/20/2005	Gerhard Vogelbacher	WBA05302	7795

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EXAMINER

EWALD, MARIA VERONICA

ART UNIT	PAPER NUMBER
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1722

MAIL DATE	DELIVERY MODE
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09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,736

Applicant(s)

VOGELBACHER ET AL.

Examiner

Maria Veronica D. Ewald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/05&10/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/20/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Translation of JP 2001239767</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 8 and 11 – 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ulcej (U.S. 6,663,375). Ulcej teaches an extrusion die having at least one flexible lip element (item 44 – figure 2) for discharging extruded material from a gap (item 50 – figure 2), the flow cross section of which can be modified, wherein at least one flexible lip element can be moved relative to the other lip element by means of a plurality of jointly actuatable lever elements (item 72 – figure 2; column 5, lines 5 – 20); wherein the flexible lip element has a tapered flexural region between an exit region and a die body (item 60 – figure 2), the plurality of jointly actuatable lever elements being situated between the exit region and the die body (figure 2); wherein on one end of the plurality of lever elements is mounted in a groove in the exit region (figure 2), and on the other end pivotably engages with a slide in the die body or a retaining element

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associated therewith (item 94 – figure 2; column 5, lines 5 – 20), the slide being supported with respect to the die body and/or the retaining element (figure 2); wherein the slide can be moved back and forth linearly in an X direction (column 6, lines 10 – 15); wherein the slide can be moved back and forth in an X direction by means of an actuating element (item 144 – figure 16; column 6, lines 10 – 15); wherein the actuating element is designed as a manually actuatable drive device in particular a screw thread or spindle (item 144 – figure 16; column 6, lines 10 – 25).

With respect to claims 7 – 8, the reference further teaches that the actuating element is designed as a geared element, servomotor, electromechanical drive device, hydraulic cylinder, or the like (column 5, lines 60 – 68; column 6, lines 1 – 20); wherein the slide is mounted in a recess in the die body or retaining element thereof (figure 2).

With respect to claims 11 – 13, Ulcej further teaches that the gap height of the flow cross section between the respective oppositely situated lip elements may be modified by a linear motion of the slide in the X direction as the result of pivoting of the lever elements about an angle (column 6, lines 10 – 25); wherein a plurality of lever elements adjacently situated in parallel are pivotably mounted at one end in the flexible lip element (figures 2 and 4), and at the other end are mounted in the slide at a uniform distance from one another (figures 2 and 4), the slide element being supported and mounted so as to be linearly movable in the X direction with respect to the die body or retaining element (column 6, lines 10 – 25); wherein the other flexible lip element has a plurality of actuators running over the entire width in order to adjust the flexible lip element between an exit region, a tapered region, and a die body over the width as a

function of the location, for a setting a parallel uniform gap (item 52 – figure 2; column 4, lines 40 – 45).

Claims 1 – 2 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hajime (JP 2001293767). Hajime teaches an extrusion die having at least one flexible lip element (item 32 – figure 1) for discharging extruded material from a gap (item α– figure 1), the flow cross section of which can be modified, wherein at least one flexible lip element can be moved relative to the other lip element by means of a plurality of jointly actuatable lever elements (item 41 – figure 1; paragraphs 0017 – 0018 of translation); wherein the flexible lip element has a tapered flexural region between an exit region and a die body (figure 1), the plurality of jointly actuatable lever elements being situated between the exit region and the die body (figure 1); wherein the other flexible lip element has a plurality of actuators running over the entire width in order to adjust the flexible lip element between an exit region, a tapered region, and a die body over the width as a function of the location, for a setting a parallel uniform gap (item 7 – figure 1; paragraph 0003 of translation).

Claims 1 – 10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipate by Druschel (U.S. 6,017,207). Druschel teaches an extrusion die having at least one flexible lip element (item 28 – figure 2) for discharging extruded material from a gap (item 32 – figure 2), the flow cross section of which can be modified, wherein at least one flexible lip element can be moved relative to the other lip element by means of a

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plurality of jointly actuatable lever elements (item 38 – figure 2; column 8, lines 1 – 15, 31 – 54); wherein the flexible lip element has a tapered flexural region between an exit region and a die body (item 34 – figure 2), the plurality of jointly actuatable lever elements being situated between the exit region and the die body (figure 2); wherein on one end of the plurality of lever elements is mounted in a groove in the exit region (figure 2), and on the other end pivotably engages with a slide in the die body or a retaining element associated therewith (item 40 – figure 2; column 8, lines 1 – 15, 30 – 54), the slide being supported with respect to the die body and/or the retaining element (figure 2); wherein the slide can be moved back and forth linearly in an X direction (column 6, lines 50 – 60); wherein the slide can be moved back and forth in an X direction by means of an actuating element (column 6, lines 62 – 67); wherein the actuating element is designed as a manually actuatable drive device in particular a screw thread or spindle (column 6, lines 62 – 67).

With respect to claims 7 – 8, the reference further teaches that the actuating element is designed as a geared element, servomotor, electromechanical drive device, hydraulic cylinder, or the like (column 6, lines 65 – 67); wherein the slide is mounted in a recess in the die body or retaining element thereof (figure 2).

With respect to claims 9 – 10 and 13, the reference also teaches that the slide in the recess is supported by a plurality of needle roller bearing elements (column 7, lines 30 – 50; column 8, lines 1 – 15); wherein the slide can be linearly moved, and under pushing or pulling loads is supported by a plurality of bearing elements (column 7, lines 30 – 50; column 8, lines 1 – 15); wherein the other flexible lip element has a plurality of

actuators running over the entire width in order to adjust the flexible lip element between an exit region, a tapered region, and a die body over the width as a function of the location, for a setting a parallel uniform gap (figure 13; column 10, lines 54 – 61).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dieckmann, et al. (U.S. 4,439,125). Dieckmann teaches an extrusion die having at least one flexible lip element (item 46 – figure 1) for discharging extruded material from a gap (item 38 – figure 1), the flow cross section of which can be modified, wherein at least one flexible lip element can be moved relative to the other lip element by means of a plurality of jointly actuatable lever elements (items 54 and 56 – figure 1; column 3, lines 50 – 60).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Brown (U.S. 4,125,350). Brown teaches an extrusion die having at least one flexible lip element (item 32 – figure 1) for discharging extruded material from a gap (item 28 – figure 1), the flow cross section of which can be modified, wherein at least one flexible lip element can be moved relative to the other lip element by means of a plurality of jointly actuatable lever elements (items 100 and 110 – figure 1; column 4, lines 12 – 26).

References of Interest

14. Vermeylen, et al. (U.S. 4,032,284) is cited of interest to show the state of the art. Vermeylen, et al. teach the use of a pivotable arm to adjust the gap in a die assembly.

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Two flexible lips are adjusted with respect to each other via two motors, which cause two wing components to pivot around a shaft (figure 1).


Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVE


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